



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/849,825

05/21/2004

Nadia Gardel

119740

8388

25944 7590 06/22/2009

OLIFF & BERRIDGE, PLC  
P.O. BOX 320850  
ALEXANDRIA, VA 22320-4850

EXAMINER

FRAZIER, BARBARA S

ART UNIT

PAPER NUMBER

1611

MAIL DATE

DELIVERY MODE

06/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/849,825	<b>Applicant(s)</b> GARDEL ET AL.	
	<b>Examiner</b> BARBARA FRAZIER	<b>Art Unit</b> 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-52 and 54-104 is/are pending in the application.
- 4a) Of the above claim(s) 31-39,43-47,86-94,98-102 and 104 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30,40-42,48-52,54-85,95-97 and 103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/27/09 has been entered.

### ***Status of Claims***

2. Claims 1-4, 6-52, and 54-109 are pending in this application. Cancellation of claims 5 and 53 is acknowledged.
3. Claims 31-39, 43-47, 86-94, 98-102, and 104 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected subject matter, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/18/07.
4. Claims 1-4, 6-30, 40-42, 48-52, 54-85, 95-97, and 103 are examined.

### ***Response to Arguments***

5. In response to Applicant's arguments that the references of Hanna in view of Bara at least fail to teach or suggest that "the solid particles of polymethyl methacrylate

Art Unit: 1611

comprise at least two polymethyl methacrylates having different densities”, specifically that Bara does not teach that two different PMMA particles can and should be used, said arguments have been considered but are deemed moot in view of the new grounds of rejection, outlined below.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**7. Claims 1-4, 6-30, 40-42, 48-52, 54-85, 95-97, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al (US Patent 5,843,417) in view of Hansenne et al (US Patent 6,432,389) and Lebreton (US Patent 6,207,175).**

The claimed invention is drawn to a fluid cosmetic composition in the form of a water-in-oil emulsion comprising a liquid fatty phase, an aqueous phase, a dimethicone copolyol and solid particles of polymethyl methacrylate, the liquid fatty phase comprising isododecane and the composition being free of cyclotetrasiloxane, wherein the solid particles of polymethyl methacrylate comprise at least two polymethyl methacrylates having different densities (see claim 1).

Hanna et al teach a water-in-oil (W/O) emulsion, wherein the oil is preferably a C10-C14 saturated, linear, or branched hydrocarbon such as isododecane (col. 1, lines 49-54). The emulsion contains one or more surfactants such as dimethicone copolyol, lauryl methicone copolyol, and cetyl dimethicone copolyol (col. 5, lines 3-5). The W/O emulsion preferably contains a water-soluble and/or water-dispersible polymer, and may

Art Unit: 1611

also contain various ingredients common in the cosmetics art, including fillers and sunscreens (col. 2, lines 4-12 and col. 6, lines 66-67). The compositions are cosmetic products, which may be used on the skin, such as a liquid foundation, concealer, or blush (col. 1, lines 34-35). The composition may also contain other oils commonly used in cosmetic emulsions such as silicone oils, including volatile silicone oils such as linear and cyclic silicone oils (col. 3, lines 33-35) and does not contain cyclotetrasiloxane.

Hanna et al do not specifically teach the presence of polymethyl methacrylate particles in the composition.

Hansenne et al teach a topically cosmetic/dermatological composition well suited for the UV-photoprotection of human skin, comprising an effective UV-photoprotecting amount of at least one UV-A and/or UV-B sunscreen, and an amount of a methyl methacrylate crosspolymer, formulated into a topically applicable, cosmetically/dermatologically acceptable vehicle (abstract). An example of the particulates of methyl methacrylate crosspolymer is Jurymer MB-1P (col. 2, line 66 - col. 3, line 5). It is noted that this particle is also exemplified by Applicants as being suitable for the claimed invention; see paragraph 23 and Example 1, paragraph 132 of Applicant's specification. The methyl methacrylate crosspolymer provides the benefits of reducing the greasiness and improving the dryness of the formulation (abstract and col. 2, lines 30-35). The compositions can be formulated into a wide variety of product types, including water-in-oil emulsions (col. 7, lines 34-36). Hansenne et al further teach that a variety of additional components can also be incorporated into the composition (col. 9, lines 55-64).

Lebreton teach powdered cosmetic and/or dermatological lotion comprising a powdered phase comprising at least one active powder and hollow particles based on at least one acrylic or methacrylic polymer or copolymer (abstract). The active powder may be a protective powder, for example, for UV protection (col. 3, lines 10-11). The addition of the hollow particles based on methacrylic polymer allows for a powdered phase which does not become clogged, while being soft on application, (col. 1, lines 63-66). Examples of hollow particles include poly(methyl methacrylate) particles, such as "Covabead LH 85" (col. 3, lines 42-45). It is noted that this particle is also exemplified by Applicants as being suitable for the claimed invention; see paragraph 23 and Example 1, paragraph 131 of Applicant's specification.

It is further noted that "Jurymer MB1" and "Covabead LH 85" are examples of two polymethyl methacrylates having different densities, as evidenced by Applicant's specification (see paragraph 23 and Example 1 of Applicant's specification).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to add UV formulations comprising methyl methacrylate crosspolymer and hollow particles of poly(methyl methacrylate) (i.e., two polymethyl methacrylates having different densities) to the formulation of Hanna et al; thus arriving at the claimed invention. One skilled in the art would be motivated to add the UV formulation comprising methyl methacrylate crosspolymer to the formulation of Hanna et al because said addition provides the benefits of reducing the greasiness and improving the dryness of the formulation, as taught by Hansenne et al. One would reasonably expect success from said addition because Hanna et al teach that its formulations may

Art Unit: 1611

include various ingredients common in the cosmetics art, including sunscreens, and because Hansenne et al teach that compositions can be formulated into a wide variety of product types, including water-in-oil emulsions. Additionally, one skilled in the art would be motivated to add hollow particles of poly(methyl methacrylates) to the methyl methacrylate crosspolymer composition of Hansenne et al because the addition of said hollow particles to an active powder formulation provides the benefits of a powdered phase which does not become clogged, while being soft on application, as taught by Lebreton. One would reasonably expect success from said addition because Lebreton teaches that the active powders, to which its hollow particles are added, include protective powders such as UV protection, and because Hansenne et al teach that a variety of additional components can also be incorporated into its composition.

Regarding the density ranges and differing densities of two polymethyl methacrylates (claims 2-4, 6-12, 50-52, and 54-60), it is noted that the polymethyl methacrylates taught by Hansenne et al and Lebreton (i.e., Jurymer MB1-P and Covabead LH 85) are the same as those exemplified by Applicants, and therefore would necessarily have the same density ranges and differing densities as the claimed invention.

Regarding the amount of polymethyl methacrylate (claims 13-15 and 61-63), Hansenne et al exemplify amounts of methyl methacrylate crosspolymer of 3-5% (Examples 1 and 2), and Lebreton teaches amounts of hollow particles more preferably ranging from 0.1 to 5% (col. 4, lines 11-15). These amounts are comparable to those of the claimed invention; one skilled in the art would be motivated to select amounts from

Art Unit: 1611

within said ranges by routine experimentation, in order to optimize properties of the resultant composition, such as flowability and skin feel.

Regarding the dimethicone copolyol (claims 16-20 and 64-68), Hanna et al teach the presence of dimethicone copolyol in the W/O emulsion (col. 5, lines 3-5).

Regarding the amount of dimethicone copolyol (claims 21 and 69), Hanna et al teach that the amount of oil surfactant useful in the W/O emulsion is most preferably 8-10 wt.% (col. 5, lines 29-33). This is comparable to Applicant's amount of from 5% to 10% by weight.

Regarding the amount of isododecane or volatile hydrocarbon based oil (claims 22-24 and 77-79), Hanna et al teach that the W/O emulsion preferably contains 10-55% oil (col. 2, lines 62-65). These amounts overlap those of the claimed invention, and one skilled in the art would be motivated to select amounts of isododecane from within said ranges by routine experimentation, in order to optimize the stability of the resultant emulsion.

Regarding the additional volatile oil (claims 25-30 and 80-85), Hanna et al teach that the composition may also contain other oils commonly used in cosmetic emulsions such as silicone oils, including volatile silicone oils such as linear and cyclic silicone oils (col. 3, lines 33-35). Bara teaches that silicone oils such as decamethylcyclopentasiloxane are known to be used in W/O emulsions for making up the skin (col. 3, lines 33-42). Thus, it would have been within the purview of the skilled artisan to select silicone oils such as decamethylcyclopentasiloxane as the silicone oils taught by Hanna et al. Additionally, Hanna et al teach that oil is 10-55% of the



Art Unit: 1611

composition, and the silicone oil is 0-50% of the oil (col. 2, lines 62-63 and col. 3, lines 37-42). Therefore, the amount of additional volatile oil is 0-27.5%. This amount range overlaps those of the claimed invention, and one skilled in the art would have been motivated to manipulate the amount of additional oil present by routine experimentation, in order to optimize the desired feel and behavior of the composition, as taught by Hanna et al (col. 3, lines 37-38).

Regarding the aqueous phase (claims 40-42 and 95-97), Hanna et al teach that solid particles are present in the emulsion (col. 3, lines 45-49), and therefore water-dispersible compounds are present in the aqueous phase. Additionally, Hanna et al teach that the aqueous phase is present in an amount ranging more preferably from 30 to 50% by weight (col. 2, lines 37-38). This amount is comparable to or overlaps that of the claimed invention, and one skilled in the art would be motivated to select amounts of isododecane from within said ranges by routine experimentation, in order to optimize the stability of the resultant emulsion.

Regarding the form of the composition (claims 48 and 103), Hanna et al teach that the composition is in the form of a skin makeup composition (for example, see col. 7, Example).

Regarding the C<sub>8</sub>-C<sub>22</sub> alkyl dimethicone copolyol (claims 49 and 70-74), Hanna et al teach the presence of cetyl dimethicone copolyol in the W/O emulsion (col. 5, line 5), in an amount of 5-15% (col. 5, lines 29-33). This amount is comparable to Applicant's amounts, and it would be within the purview of the skilled artisan to adjust the amount of

Art Unit: 1611

surfactant by routine experimentation, in order to optimize the stability of the resultant emulsion.

Regarding the volatile hydrocarbon-based oil (claims 49, 75, and 76), Hanna et al teach that isododecane is present in the W/O emulsion (col. 1, lines 49-55).

### ***Conclusion***

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Sharmila Gollamudi Landau/  
Supervisory Patent Examiner, Art Unit 1611